

STARK & STARK, P.C.
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Attorneys for Plaintiff

**IN THE UNITED STATES DISTRICT COURT
FOR THE MIDDLE DISTRICT OF PENNSYLVANIA**

Paul Dunn,

Plaintiff,

v.

**Jack Frost Big Boulder Ski Resort and
JFBB Ski Areas, Inc.,**

Defendants.

:
:
: **CIVIL ACTION**
: **No.: 3:17-cv-00058-MEM**
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PLAINTIFF'S PRE-TRIAL MEMORANDUM

This matter is scheduled for a final Pre-Trial Conference on March 1, 2018 at 1:30 p.m. before the Honorable Malachy E. Mannion. Plaintiff submits the following Memorandum for consideration. The date of conference was held by Counsel on Friday, February 23, 2018.

A. A brief statement as to federal court jurisdiction:

In this matter, jurisdiction is invoked pursuant to 29 U.S.C. Sec 1332, based on diversity of citizenship, as the action is between Plaintiff, Paul Dunn, a citizen of British – United Kingdom and Defendant, Jack Frost Big Boulder Skir Resort and JFBB Ski Areas, Inc., business entities regularly conducting business in Carbon County, Pennsylvania.

B. A summary statement of facts and contentions as to liability:

This action arises out of a trip and fall accident that occurred on January 30, 2015 at approximately 5:00 p.m. Plaintiff was at Jack Frost Big Boulder Ski Resort with friends for the purpose of skiing. On arrival, Plaintiff had attempted to buy a lift ticket, but when he went up to the window it was closed with a sign saying to go to the customer service desk to buy a lift pass. As he walked into the lodge to go to customer service, he was suddenly caused to trip on a small drying/fan that was dangerously placed in the walkway of the entryway. Plaintiff fell with his right arm outstretched suffer a right mid-shaft radius and midpshaft peri-prothetic ulna shaft fracture and aggravation of previously fixed Monteggia fracture of the right forearm. Consequently, Plaintiff did not purchase a lift pass.

Plaintiff is a 20 year old college student who injured his right arm at a ski lodge in the setting of a prior internally fixed Monteggia fracture in the same arm in 2008. He suffered immense pain because of the trip and fall. The injury required him to undergo a surgical treatment for the fractures in his right forearm. He had great challenges with the requirements of dialing living including grooming and feeding himself. Plaintiff spent considerable time receiving occupational therapy for which he had to miss school and as a result he had to enroll in summer classes because of the disruption of his freshman year. He will continue to experience pain and limitations and will likely face additional therapy and possibly surgery.

C. Comprehensive statement of undisputed facts as agreed to by Counsel:

The parties agree that the alleged accident occurred on January 30, 2015 between 5:00 p.m. and 6:00 p.m. at Jack Frost Big Boulder Ski Resort.

The parties agree that injuries sustained are related to the alleged accident.

D. A brief description of damages:

(1) Principal Injuries Sustained: Plaintiff suffered a right mid-shaft radius and midshaft peri-prosthetic ulna shaft fracture and aggravation of previously fixed Monteggia fracture of the right forearm.

(2) Hospitalization and Convalescence: Immediately following the fall, Plaintiff was taken by ambulance to Geisinger Wyoming Valley Emergency Room where an examination revealed swelling and tenderness of the mid-shaft of the right forearm. As a result of the fall, Plaintiff suffered serious, painful and permanent injuries as follows: Right mid-shaft radius and mid-shaft peri-prosthetic ulna shaft fracture; and Aggravation of previously fixed Monteggia fracture of the right forearm.

An X-ray of his right wrist revealed displaced fractures of this mid-radial and ulnar diaphysis, and an x-ray of his right elbow revealed a re-demonstration of displaced angulated fractures of mid right radial and ulnar diaphysis and an overlying soft tissue edema. He was diagnosed to have a closed fracture of his right forearm. The right arm was splinted and he was subsequently transferred to The Children's Hospital of Philadelphia.

On January 31, 2017, Plaintiff was seen by David A. Spiegel, M.D. Physical examination revealed a very limited pronation and supination of his right forearm. His full finger extension was limited because of pain. Dr. Spiegel recommended surgical treatment for the mid-shaft radius and mid-shaft peri-prosthetic ulna shaft fracture.

On that same day, Plaintiff underwent an open reduction, removal of implants and plate fixation of his right ulna fracture with a 10-hole 3/5 LCP (Locking Compression Plate) and a

closed reduction and flexible nailing of his right mid-shaft radius fracture. Plaintiff was discharged from the facility on February 1, 2015. He was instructed to remain non weight bearing with his right hand, to avoid contact sports, lifting/straining and to limit activities based on pain. He was recommended to return to school (college) after he had functionally improved.

Plaintiff presented to Dr. Spiegel for follow up on March 4, 2015 and was recommended to receive occupational therapy two times a week for 6 weeks. He was advised to use a protective splint.

From March 9, 2015 to April 15, 2015, Plaintiff received occupational therapy at the Children's Hospital of Philadelphia. He continued to have numbness on the dorsal aspect of his right hand near metacarpophalangeal joint of his index finger. He was discharged from therapy on April 22, 2015 with a home exercise program.

(3) Present disability: Plaintiff continues to have limitations and symptoms related to this injury and follows with Dr. Spiegel. Checking his prosthesis with an orthopedic surgeon on a yearly basis to detect any loosening or osteolysis will be required. In the future he is more prone to post traumatic arthritis, and he may require re-surgery if the prosthesis needs to be changed.

(4) Special monetary damages/medical expenses: At the time of the accident, Plaintiff had health insurance with Independence Blue Cross. Equian is asserting a lien on behalf of IBC. The total benefits paid are \$17,050.57.

E. Witnesses:

1. Paul Dunn, 1137 Mt. Laurel Road, Morristown, NJ 08057.

2. Collin Johnston, 5615 Susan Road, Coopersburg, PA 18036.
3. Melissa O'Connor, 8 Woodbridge Circle, Horsham, PA 19044
4. Shannon Vetesy, 34 Mansi Drive, Albrightsville, PA 18210.
5. Carl St. Hill, PO Box 180x 155, Albrightsville, PA 18210.
6. Larissa Lopez, 102 Log Cabin Lane, Effort, PA 18330.
7. Kim Slack, Big Boulder, 434 Jack Frost Mountain Road, White Haven, PA 18661.
8. Chris Schmidt, Big Boulder, 434 Jack Frost Mountain Road, White Haven, PA 18661.
9. Danielle Dodge, Big Boulder, 434 Jack Frost Mountain Road, White Haven, PA 18661.
10. Michael Dodge, Big Boulder, 434 Jack Frost Mountain Road, White Haven, PA 18661.
11. James Davenport, Big Boulder, 434 Jack Frost Mountain Road, White Haven, PA 18661.
12. Mark Dunn, 1137 Mt. Laurel Road, Morristown, NJ 08057
13. Kayliegh Dunn, 1137 Mt. Laurel Road, Morristown, NJ 08057
14. David A. Spiegel, M.D., Pediatric Orthopedic Surgery, The Children's Hospital of Philadelphia, Richard D. Wood, 2nd Floor, 34th Street & Civic Center Blvd., Philadelphia, Pa 19104
15. William J. Vigilante, Jr., PhD, CPE, Vigilante Forensic, 200 Pembroke Circle, Phoenixville, PA 19460

E. Summary of testimony of each witness:

Witness 1 will testify as to liability and damages.

Witnesses 2, 3, 4, 5 and 6 were present at the time of the alleged incident and will testify about their observations and knowledge of the alleged incident.

Witnesses 7, 8, 9, 10 and 11 are employees of the Defendants and were present following the alleged accident. They will testify about their observations and knowledge of the alleged incident.

Witnesses 12 and 13 are the sister and father of Plaintiff. They will testify as to the damages.

Witness 14 is an expert witness. Specifically, Dr. Spiegel is an orthopedic surgeon. He will testify as to causation of the injury, his diagnosis, treatment, and the effect of the accident on Plaintiff's prior internally fixed Monteggia fracture in the same arm in 2008. See Narrative Report of David A. Spiegel, M.D. attached hereto as Exhibit A.

Witness 15 is an expert witness. Specifically, Dr. Vigilante is a human factors / ergonomics expert. He will testify that the actions of Defendant were improper, unreasonably dangerous, and/or contrary to the standard of care in a manner which caused Plaintiff's fall; that the presence of the fan along the walkway created a known trip hazard, violating known industry standards; and that Defendant failed to warn customers of the hazard created by the presence of the fan. See Narrative Report of William J. Vigilante, Jr. attached hereto Exhibit B.

F. Special comment about pleadings and discovery:

N/A.

G. A summary of legal issues involved and legal authorities relied on:

N/A.

I. Stipulations desired:

Plaintiff requests Defendant stipulate to the authenticity of medical records.

Plaintiff requests Defendant stipulate to the reasonableness and necessity of medical records and bills.

Plaintiff requests Defendant stipulate to the recoverable boardable past medical and outstanding bills.

J. Estimated number of trial days:

2 to 3 days

K. Any other matter pertinent to the case to be tried:

N/A.

L. See Schedule of Exhibits

Plaintiff's Proposed Exhibit List is attached hereto as Exhibit C.

M. Special verdict questions:

N/A.

Respectfully submitted:

STARK & STARK
A Professional Corporation

By: 

Joseph A. Cullen, Jr.

Attorneys for Plaintiff

Dated: February 23, 2018

EXHIBIT A



Pediatric Orthopedic Surgery

A Division of Children's Surgical Associates, Ltd.

THE CHILDREN'S HOSPITAL OF PHILADELPHIA
RICHARD D. WOOD CENTER, 2ND FLOOR
34TH ST. AND CIVIC CENTER BLVD.
PHILADELPHIA, PA 19104-4399
(215) 590-1527
FAX (215) 590-1501

ORTHOPEDIC FACULTY

JOHN M. FLYNN, M.D.

Division Chief

THEODORE J. GANLEY, M.D.

Director of Sports Medicine

ALEXANDRE ARKADER, M.D.

KEITH BALDWIN, M.D.

PATRICK J. CAHILL, M.D.

ROBERT M. CAMPBELL, M.D.

ROBERT B. CARRIGAN, M.D.

BENJAMIN CHANG, M.D.

RICHARD S. DAVIDSON, M.D.

MALCOLM L. ECKER, M.D.

B. DAVID HORN, M.D.

HELEN M. HORSTMANN, M.D.

J. TODD LAWRENCE, M.D., Ph.D.

BONG S. LEE, M.D.

INES LIN, M.D.

WUDBHAV SANKAR, M.D.

APURVA SHAH, M.D.

DAVID A. SPIEGEL, M.D.

KRISTIN WEBER, M.D.

LAWRENCE WELLS, M.D.

JENNIFER WINELL, M.D.

SPORTS MEDICINE PEDIATRICIANS

NAOMI J. BROWN, M.D.

MATTHEW F. GRADY, M.D.

DANIELLE MAGRINI, D.O.

CHRISTINA L. MASTER, M.D.

CHRISTIAN D. TURNER, M.D.

BRIAN VERNAU, M.D.

S.C.C. IN BUCKS COUNTY
CHALFONT, PA 18914
(215) 997-5730

S.C.C. IN MONTGOMERY COUNTY
KING OF PRUSSIA, PA 19406
(610) 337-3232

S.C.C. IN CHESTER COUNTY
EXTON, PA 19341
(610) 594-9008

S.C.C. IN BRANDYWINE VALLEY
GLEN MILLS, PA 19342
(267) 425-8500

BUERGER CENTER FOR
ADVANCED PEDIATRIC CARE
3500 CIVIC CENTER BLVD
PHILADELPHIA, PA 19104
(215) 590-1527

S.C.C. IN ATLANTIC COUNTY
MAYS LANDING, NJ 08330
(609) 677-7895

S.C.C. IN MERCER COUNTY (PRINCETON)
PLAINSBORO, NJ 08536
(609) 520-1717

CHOP CARE NETWORK IN CAMDEN COUNTY
VOORHEES, NJ 08043
(267) 425-5400

May 8, 2017

Joseph A. Cullen, Jr., Esquire

Stark & Stark

777 Township Line Road

Suite 120

Yardley, PA 19067-5559

Re: Narrative Report for Paul Dunn

Dear Mr. Cullen:

This letter is a summary of the medical services provided for Paul Michael Dunn (MR 55091507) for an injury sustained on January 30, 2015. Paul was in the Poconos, and tripped on a fan falling onto the right arm from a standing height. He was transferred to the Children's Hospital Emergency Room where a fracture of the right radial and ulnar shafts was diagnosed.

Paul does have pre-existing history with regard to the right upper extremity. Paul had a fall on the right upper extremity back in 2008, and was diagnosed with a Monteggia fracture. He was surgically treated for this, with an open reduction fixation of the ulna, but the radial head remained unstable. On June 11, 2008, he was taken to the operating room for a second surgery in which his ulna fixation was revised and he had an open reduction and reconstruction for the unstable radiocapitellar joint. This surgery was successful, and the radial head remained reduced. Prior to the recent injury, his last follow documented in the medical record was on January 5, 2010, at which point he could flex to 95-100 degrees, pronate to neutral, and supinate approximately 30 degrees. He was not having pain at that point in time. Paul had received occupational therapy for almost a year, and this therapy was completed in March 2009. His final range of motion, documented on an occupational therapy note in March 2015, notes a passive range of motion of the right elbow includes negative 5 degrees extension, 126 degrees flexion, and 45-50 degrees of supination. Active range of motion of the right elbow was notable for negative 5 degrees extension, and 115 degrees flexion. Serial casting was also utilized to improve his range of motion.

I met Paul on January 31, 2015. As mentioned previously he had fallen on the outstretched right upper extremity, and his radiographs demonstrated a comminuted mid-shaft fracture of the right ulna occurring at the level of the distal screw, associated with a mid-shaft fracture of the radius at approximately the same level. Paul was taken to the operating room on January 31, 2015 for an open reduction and internal fixation of his ulna fracture with a longer plate. His unstable



Paul Dunn
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radius fracture was treated by closed reduction and intramedullary fixation with a titanium rod. Paul tolerated this procedure well, and he was discharged to home on February 1, 2015. I next saw Paul in clinic on February 11, 2015, and at this visit we removed his splint and applied a long arm cast. I next saw Paul on March 4, 2015, and at that point in time we noted that he had decreased sensation in the area of the proximal right thumb and the web space between the index finger and the thumb, but that this was improving. His finger range of motion was improving, especially his thumb. Radiographs at that time showed that the implants were in stable position and there was some evidence of healing at the fractures. At this point in time we elected to discontinue the cast immobilization, and instead use a removable splint which would be fashioned by our occupational therapist. We had also written a prescription for occupation therapy to work on upper extremity rehabilitation. At that point we were planning to see Paul back in another four weeks. Paul was seen the same day by Kelly Ferry, an occupational therapist at CHOP. Kelly noted in the documentation of Paul's previous range of motion at the end of his treatment for the original injury, which I have quoted previously in this letter. At this initial visit it was noted that Paul had very limited range of motion as he had just come out of his cast. Paul then commenced occupational therapy while using the splint for protection.

I next saw Paul on April 8, 2015. At that point in time he was more than two months following his surgery. My impression was that his supination was approximately 5-10 degrees and pronation approximately 30-40 degrees. I noted that healing was progressing radiographically, but that he had not completely healed on x-ray. An occupational therapy note from March 11, 2015 noted that Paul had approximately 20 degrees of pronation and supination, while lacking 40 degrees of elbow extension, and demonstrating 110 degrees of active flexion at the elbow. The next occupational therapy note is from April 15, 2015 and at this point Paul had 5 degrees of active supination, and 40 degrees of active pronation, with full elbow flexion at 130 degrees and full passive extension. Paul was discharged from occupational therapy on April 22, 2015, and at that time had 5 degrees of supination and 40 degrees of active pronation. He was discharged with a home exercise program.

I next saw Paul in Orthopaedic clinic on June 30, 2015, at which point he reported an area of decreased sensation over the dorsum of his hand just out to the MCP joint. This sensation was grossly intact to light touch on physical examination. We noted continued abnormality and forearm rotation with supination to neutral and pronation to 15 degrees. His x-rays showed excellent interval healing and we asked that he continue with a removable splint for protection. I then saw Paul in December 29, 2015. He was back to his usual activities. By my examination he had continued improvement of the abnormality and sensation over his superficial radial nerve distribution, and there were still a few patchy areas of loss of sensation. I noted at that time that he had 10-15 degrees of supination which is consistent with his discharge supination as measured by the occupational therapist earlier in the year. I also noted 40-50 degrees of pronation, slightly greater than had been noted at that time. At that time we discussed the pros and cons of implant removal and as Paul was asymptomatic, he elected not to remove the implant.

Paul Dunn
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I most recently saw on January 13, 2017. I noted that his range of motion remained at the baseline, and he was asymptomatic and participating in all activities as tolerated. At that time, in the absence of symptoms, Paul elected to leave the implants in place. I offered to see Paul in another two years for a follow up to ensure that his function is satisfactory and I am happy to see him sooner if any questions or problems arise.

In summary, Paul initially sustained a Monteggia fracture back in 2008 after a fall, and he initially underwent open reduction of the ulna but the radial head remained unstable, so he had a second procedure in which the ulnar fixation was revised and he had an open reduction and stabilization of the proximal radius, a "Bell-Tawse" procedure. Following this, the radial head remained located and Paul had some residual loss of forearm pronation and supination but was functioning well. He then sustained a fall when he tripped over a fan back in January 2015, sustaining a mid-shaft fracture of the radius and ulna which required an open reduction of the ulna with revision of the ulnar plate, and we were able to perform a closed reduction and flexible nailing of the radius. Paul achieved a union of both bones, and is currently back to his activities, and my perception is that he has returned to the activities that he had participated in prior to this most recent fracture. A review of all the information available concerning his forearm rotation suggests that there are some differences before and after this most recent surgery. My impression from this review is that his pronation may have improved slightly, with perhaps 20-30 degrees more, while his supination has been reduced by a similar number of degrees. Thus a review of all the records indicates a mild change in both pronation and supination, in which there was no loss of overall motion but a mild shift in the arc of motion without any apparent loss of function. My recollection is that Paul felt that he was participating in the same activities that he had participated pre-injury without any restrictions. Paul may continue to participate in activities as tolerated, and there will remain a small risk of refracture given that he has a plate on the ulna. Since he is asymptomatic I support his decision to leave the implants in place. I will continue to follow Paul and be available to address any concerns he has in the future. At present the only future charges that I would anticipate would be for an out-patient visit in two years, and ultimately for an outpatient surgical procedure should he choose to remove the implants.

Sincerely,



David A. Spiegel, MD
Pediatric Orthopaedic Surgeon
The Children's Hospital of Philadelphia
Associate Professor of Orthopaedic Surgery
Perelman School of Medicine at the University of Pennsylvania
Consultant in Orthopaedic Surgery, Hospital and Rehabilitation
Centre for Disabled Children, Banepa, Nepal

DAS/ed

EXHIBIT 2

EXHIBIT B

VIGILANTE FORENSIC

Human Factors | Ergonomics Consulting

Report of: William J. Vigilante, Jr., PhD, CPE

Date: August 31, 2017

Case Caption: Paul Dunn
v.
Jack Frost Big Boulder Ski Resort and JFBB Ski Areas, Inc.

VF Case Number: 17-125

Prepared for: Joseph A. Cullen Jr., Esq.
Stark and Stark
777 Township Line Road
Suite 120
Yardley, PA 19067

Phone: (267) 907.9612
Email: jcullen@stark-stark.com

A. INTRODUCTION

At about 5:56 PM on Friday January 30, 2015, Paul Dunn tripped and fell over a fan located along the walkway within the lodge at the Big Boulder Ski Resort. The Big Boulder Ski Resort is located at 357 Big Boulder Drive, Lake Harmony, Carbon County, PA. Big Boulder employees placed the fan in the walkway in an effort to dry water and snow tracked into the lodge from the entrance doors. Dunn was injured in the fall.

The purpose of my investigation was to determine if:

- The actions of Big Boulder Ski Resort were improper, unreasonably dangerous, and/or contrary to the standard of care in a manner which caused Paul Dunn's fall; and
- The presence of the fan along the walkway was a reasonably open and obvious condition as it was presented to Paul Dunn.

I have included a current CV outlining my qualifications and a listing of my testimonies for the past four years within the Appendix section of this report. Vigilante Forensic currently invoices my work associated with this investigation at a rate of \$375.00 per hour.

I may use the following materials as exhibits to illustrate my testimony: photos taken of the incident walkway, fan, and the lodge; photos of exemplar warnings; and the references and standards cited within this report.

B. AVAILABLE MATERIAL

- Complaint
- Defendant's
 - Incident Report
 - Response to Plaintiff's Supplemental Request for Production of Documents
- Deposition transcripts and exhibits of:
 - Collin Johnston, dated 8/15/2017
 - Danielle Dodge, dated 6/13/2017
 - Melissa O'Connor, dated 8/15/2017
 - Paul Dunn, dated 6/19/2017
 - James Davenport, dated 6/13/2017
- Statements of:
 - Collin Johnston, dated 12/6/2016
 - Melisa O'Connor, dated 12/6/2016
- Digital copy of color photograph of lodge and fan
- My site inspection on 6/13/2017

C. SITE DESCRIPTION

Big Boulder Ski Resort (Big Boulder) is located in Lake Harmony, PA. Big Boulder opened in 1957 and is currently owned and operated by Peak Resorts (JD, 16). Peak Resorts operates 14 ski resorts primarily located in the Northeast and Midwest. Peak Resorts own 13 of the 14 ski resorts that they operate including Big Boulder (JD, 9).

Big Boulder possesses 16 ski slopes with 7 ski lifts and a tubing park. Big Boulder also possess two lodges (the Main Lodge and Big Boulder Park Lodge) located at the base of the slopes on the north side of the mountain. The Main Lodge is located adjacent to the main parking lot.

The Main Lodge has three sections and is oriented east to west¹ along the base of the mountain. The main lodge is built on a slight hill that slopes down from west to east. The center and east sections of the Main Lodge consists of two stories. However, the west section of the Main Lodge is a single story which connects directly to the second story of the center section. A bridge connects the second floor of the center section to the second floor of the west section of the Main Lodge. A walkway from the main parking lot to the south side of the Main Lodge and the base of the ski slopes is located under the bridge.

The west section of the Main Lodge houses the cafeteria, restrooms, and kitchen area. The cafeteria is located in the southern part of this section of the building. The restrooms are located on the north side of the cafeteria, and the kitchen is located behind (west of) the cafeteria and restrooms. Ticket and group sales, ski patrol and first aid, guest services, and a retail store are located on the first floor of the center and east sections of the Main Lodge (JD, 29). Conference rooms and offices are located on the second floor of the east section of the Main Lodge.

Big Boulder refers to the second floor of the center section of the Main Lodge as the "Glass House" (DD, 28). The Glass House has two separate rooms. Both rooms possess a vaulted ceiling. The north section of the Glass House (Little Boulder Room) is about 54' long (east to west) and 42' deep (north to south). The Little Boulder (LB) Room possess rows of tables and chairs oriented north to south extending from the north wall. A stairway in the center, east side of the LB Room provides access to guest services which is located in the lower level (JD, 29,30). There are two sets of windows located at the east and west corners of the north wall of the LB Room. The windows are about 8' wide and about 7.5' tall and located about 1.5' above the floor. There is another set of windows in the middle of the north wall. The center windows are located about 9.5' above the floor and extend up into the vaulted ceiling.

The south section of the Glass House consists of a single story, three sided sun room with full length, glass window walls. The sun room is about 25.75' long (east to west) an about 15' deep (north to south). The sun room extends into the LB Room about 6'. The north side of the sun

¹ The orientation of the Main Lodge actually runs northwest to southeast. However, for ease of reference in the report the orientation will be referred to as east to west.

room is separated from the south side of the LB Room by an approximately 19.5" wide half wall. Access to the sun room is from an opening on the east side of the half wall. A planter is located along the top of the half wall. An approximately 14.25" wide counter runs along the north side of the half wall. Tables and chairs are located in the sun room.

There are two exterior entrances to the LB Room. The entrances are located along the south wall at the east and west corners of the LB Room. The sun room is located between the two entrances. The entrances consist of double, approximately 36" wide, metal framed glass doors. The doors open out onto a concrete patio area that surrounds the sun room and extends toward the base of the slopes. Paul Dunn tripped and fell as he was entering the LB Room from the west entrance (DD, 32,33,40).

The cafeteria is accessed from an approximately 13' wide opening in the west wall of the LB Room (the hallway leading to the restrooms is located just north of the cafeteria but separated from the cafeteria by an internal wall). The cafeteria entrance is located just north of the west entrance doors. A building support column is located about 6' north of the west entrance doors, 93" east of the cafeteria entrance, and 6" west of the west side of the sun room. The column is about 14" deep (north to south) and 22" wide (east to west). The interior, west wall of the sun room runs along the east side of the west entrance and ends about 6' north of the doors. The configuration of the sun room, cafeteria, and support column creates an entrance hallway from the exterior doors to the LB Room.

At the time of Dunn's fall, the LB Room's west entrance possessed a black rubber floor (JD, 31,32,36). The rubber flooring extended between the west wall of the LB Room/opening into the cafeteria and the east side of the support column/west side of the sun room and from the entrance doors to about 6' north of the support column. The flooring along the rest of the LB Room consisted of industrial carpet brownish/tan in color (JD, 31,32). A metal transition strip, silver in color, ran between the carpeting and rubber flooring.

D. BACKGROUND and INCIDENT DESCRIPTION

Background

On January 30, 2015, a Big Boulder employee placed a fan near the west entrance way of the LB Room to dry the rubber flooring, minimize the amount water, snow, and ice in the entrance way, and to keep water from being tracked onto the carpeting (JD, 34-36,44,45,57). The fan has a plastic motor housing that is flat at the bottom and round on top with a carry handle affixed to its top. The fan blower exhaust port is oval in shape and located at the bottom front of the motor housing. The fan sits on four, one inch tall feet. Overall the fan is approximately 19" long, 20" high (to the top of its handle), and 17.25" wide and gray in color (JD, 48,49). The exhaust port is about 5" tall and extends out about 5.5" from the motor housing. A knob on the back of the fan turns the fan on and controls the speed of the fan (i.e., high, medium, low) (JD, 39). Figure 1 is a photograph of the fan taken after Dunn's fall (DD, 44,45; PD, 52-54). The

photograph depicted in Figure 1 is taken from the west entrance looking toward the northeast side of the LB Room. Paul Dunn testified that the location of the fan in Figure 1 is not where it was at the time of his fall (the fan was located further east (in back of) the support column which is the light green upright structure that is depicted along the right side of Figure 1) (PD, 61).



Figure 1. Incident fan.

Incident Description

At about 5:30 PM on January 30, 2015, Paul Dunn and four of his friends arrived at Big Boulder and parked in the parking lot (PD, 17-19,25,27,31). Dunn and two of his friends (Collin Johnston and Melissa O'Connor) were planning on going skiing/snowboarding (PD, 23,25,27; MO, 12). Dunn's other two friends (Caroline Acker and Tori Currucullo) were going to sit in the lodge and work on their homework (PD, 23; MO, 12).

When they arrived at Big Boulder, Dunn and his four friends entered the Glass House with their clothing/gear (CJ, 13-15; MO, 14,16). They entered the lodge via the eastern entrance doors and sat at a table in the area furthest from the cafeteria (CJ, 14,15). After putting their clothes on, Dunn, Johnston and O'Connor walked outside to find the ticket booth to purchase lift tickets while Acker and Currucullo stayed at the table (PD, 18,19; CJ, 13-15; MO, 15,16,18,).

Dunn, Johnston, O'Connor exited the lodge via the same doors that they entered through (i.e., the east entrance) (CJ, 15). Dunn and his friends asked around where they could purchase tickets and were told they had to go to guest/customer services which was located below the LB Room (PD, 28,30,37; CJ, 17). They were also told that there was a stairway in the middle of the lodge area they had just come from (PD, 37; CJ, 17).

Johnston, O'Connor, and Dunn walked back into the lodge using the west entrance next to the cafeteria (CJ, 13-16; MO, 18). Johnston opened the right entrance door (looking into the lodge) and was followed by O'Connor and Dunn (PD, 44,50,51; CJ, 17,18; MO, 23,24). As they walked along the hallway, Johnston was slightly ahead of and to the left of O'Connor and Dunn was slightly behind and to the right of O'Connor (PD, 28,50-52; CJ, 17,18,28; MO, 25,50). Dunn and his friends were talking with each other as they entered the lodge (PD, 61; CJ, 19). As they turned right around the north side of the support column toward the staircase, Dunn tripped and fell over the fan (PD, 62; CJ, 18,28; MO, 27,30,31,59). Dunn landed on his stomach with his right arm under his torso along the north side of the half wall separating the LB Room from the sun room (CJ, 48, 23; MO, 31,32).

Paul Dunn testified that:

- As they approached the entrance doors, some other people were coming out of the LB Room to their left (PD, 39,40,44).
- They walked straight into the LB Room from the entranceway (PD, 61,62).
- As they entered the LB Room and turned right, Dunn stayed to the right of and behind Johnson and O'Connor and that he was closest to the sun room wall (PD, 59,60).
- After he turned to go around the support column he tripped on the fan and fell forward (PD, 28,33-35,62-64).
- Johnston and O'Connor had turned **right before him** further from the column and that there were other people walking to their left as they turned the corner (PD, 47,50,51,72,73).

Paul Dunn testified that he was not carrying anything, he had left his snowboard, helmet and goggles outside, and he was wearing his snowboard boots, his ski pants, and jacket (PD, 42-44). However, he is not sure if he was wearing his gloves or not (PD, 44). Dunn also testified that:

- There was average activity in the lodge and there were people sitting at the tables when he walked into the LB Room (PD, 46,47).
- He was not on his cell phone (PD, 61).
- He did not hear the fan prior to falling (PD, 71).
- He does not remember hearing the fan while he was sitting on the ground after his fall (PD, 95).
- He believes that he almost completed his turn and was almost facing the stairs when he tripped over the fan (PD, 64).
- He was watching where he was going and was looking ahead (PD, 60,61,80).

- He does not remember which foot contacted the fan (PD, 63).

Paul Dunn testified that when he fell the fan was behind (north and east) of the support column and on the north side of a garbage can that was placed on the northeast side of the column (PD, 57,65,68-70,79,80). Dunn testified that the front of the fan's blower was on the metal strip between the rubber floor and carpeting (PD, 58,65,70).

Collin Johnston testified that:

- The lodge was not packed but there were people sitting in the lodge, walking around, and mingling (CJ, 21,22).
- He did not see the fan before Dunn fell (CJ, 28-30,38).
- He does not recall the fan being on or hearing the fan (CJ, 38).
- Dunn tripped as they were rounding the corner (CJ, 18,28).
- When he saw the fan after Dunn's fall it was right in the corner (CJ, 29,30).
- The photograph depicts the location of the fan after Dunn was taken away in the ambulance (CJ, 37).

Melissa O'Connor testified that:

- There were other people in the lodge (MO, 24).
- She is not sure if the fan was on. However, she did not hear any fan noise and did not notice any air coming from the fan when she walked by it (MO, 28).
- She did not see the fan as she entered the lodge and is not sure if she could see the fan as she walked around the corner (MO, 26,55).
- She remembers the fan being on the corner but does not know if it was moved before she took a photograph of it (MO, 27,57).

Big Boulder does not know how long the fan had been sitting there, if the fan was running at the time of Dunn's fall, or, if it was running, what speed the fan was on (JD, 39,58; DD, 22).

Danielle Dodge worked for Big Boulder as a ski patroller (DD, 8). Dodge responded to Dunn's fall (DD, 16). Consistent with Dunn's testimony, Dodge testified that:

- Dunn tripped within the west entrance of the LB Room (DD, 32,33,40).
- She entered the LB Room from the west entrance next to the café (DD, 17).
- She does not remember hearing the fan running when she walked into the lodge (DD, 20).
- Dunn told her that he tripped over the fan as he was entering the lodge (DD, 23).
- The witnesses stated that Dunn tripped over the fan (DD, 24).
- There were no signs posted regarding the presence of the fan (DD, 33).

E. ANALYSIS

E.1. Big Boulder violated the standard of care for patron safety and created an unreasonably dangerous condition.

Known Hazard

Same level falls include slips and trips along an otherwise level walkway. A trip hazard is defined as an object or obstacle in the walkway that can stop or block the forward movement of a pedestrian's foot while walking (1,2). During the swing phase of human gait the trailing foot is swung forward of the planted foot (1,2). At this point the pedestrian's weight is supported on the planted leg (1,2). As the swinging leg is moved forward toward heel strike, the pedestrian's weight begins to shift onto the forward foot from the now trailing foot which begins to lift off (1,2). During the swing phase of gait the pedestrian's center of gravity (COF) moves forward of the planted foot (1). If the swing is interrupted (i.e., the swinging foot contacts an object) the pedestrian's COG can move beyond its base of support causing a stumble and/or fall (1,2).

Paul Dunn experienced a same level fall when he tripped over a fan placed in the walkway of the Main Lodge at Big Boulder. The Main Lodge serves as an area for customers to socialize, purchase and eat food from Big Boulder's cafeteria, purchase equipment and clothing in Big Boulder's retail shop, purchase ski lift tickets and rentals, and change and store clothing and gear.

Same level falls are the most likely cause of customer injury in the retail industry (2-6). For this reason, the prevention of same level falls has received a significant amount of attention over the past few decades (2-6). For example, Bob Garrone notes in his article titled "Retail Falls: The Whole Story" published in the journal *Occupational Health and Safety* (3):

Falls have long been the leading source of employee injury in retail operations. In fact, the retail industry has the highest incidence of "same level" falls when compared with all other industries.

And

While there is no centralized source for data concerning retail customer injuries, it is generally known that same-level customer falls are the number one source of loss for the general liability line of coverage.

In his article titled "Keys to Retail Safety" published by the American Society of Safety Engineers, David Natalizia also highlights the prevalence of same level falls in the retail environment and notes (4):

10. Control slips, trips and falls.

Slips, trips and falls are one of the most significant issues for both employees and customers in a retail environment [emphasis added]. Don't rely on single-factor

solutions alone, such as high-traction flooring or spill cleanup stations, to solve the problem. A comprehensive approach that addresses floor factors, footwear factors and walking style factors is necessary to maximize risk reduction, even as one factor may be the focus of your efforts.

The National Safety Council² (NSC) addresses customer safety within its *Accident Prevention Manual for Business and Industry (APM)* and their *Data Sheet 495: Slips, Trips, and Falls on Floors* (2,5). The NSC's *APM* and *Data Sheet 495* are both nationally accepted standard practices for preventing customer injuries (2,5). With respect to trip and fall hazards in retail/commercial environments the NSC notes within their *Data Sheet 495* (5):

Falls on floors occur in various ways and from various causes. Changes in elevation or an unnoticed change in the coefficient of friction (such as clear water on a tiled surface) can cause a person to slip or trip and possibly fall. A person may slip and thus lose traction or trip over an open drawer, a box in the aisle, or another object.

Within their *APM*, the NSC also notes (2):

Falls on floor occur in various ways and from various causes. A person can slip on a spill or trip over an object, resulting in loss of balance and a fall. ... A trip is caused by an abrupt change in elevation causing a momentary interruption in leg swing while the body is in forward motion.

A common cause of trip and falls in the retail environment are objects and equipment left unattended in the walkway. For example, the NSC notes in their *Datasheet 495* (5):

The primary causes of tripping hazards are:

- Differences in elevation (1/4 in. [0.6cm] or greater);
- Unobserved, misplaced, or poorly designed movable equipment, fixtures, or displays
- Low profile items left in aisles or walk-ways

Within their *APM*, the NSC also notes (2):

The primary mechanical causes of falls on floors are unobserved, misplaced, or movable equipment, fixtures, or displays; poor housekeeping; and defective equipment and

In mercantile establishments, fixtures, displays and other portable equipment are involved in many customer falls. Therefore, it is important that management provide

² The NSC is a nonprofit federally chartered organization founded in 1913 and is the premier source of safety and health information in the U.S. NSC is headquartered in Itasca, Illinois and has 37,000 member facilities that employ more than 20 million people.

safe equipment and that the risk control process particularly emphasize safe placement and use of that equipment.

Bob Garone also recognizes the danger created by the presence of foreign objects along the floor in his article on Retail Safety (3):

Water/objects on floor. Water and/or foreign objects on the floor together are the leading cause of same-level falls. ... Foreign objects, such as trash, tags, clips, or anything else present on the floor, also can lead to fall accidents.

Paul Dunn tripped and fell on a fan located in the walkway. The fan was placed in the walkway by an employee of Big Boulder. The fan was about 17.25" tall, 17.25" wide, and 19" long. The fan was placed behind a support column that created a 90° turn in the walkway. The fan was located in a cross-area of the LB Room that provided access to the west entrance, the cafeteria, and the restrooms. There were no signs, warnings, or barriers to alert patrons to the presence of the fan or direct them around it. The presence and dimensions of the fan created an obstacle at ground level for anyone walking through or around the area. Big Boulders use and placement of the fan created a known trip hazard within a foreseeable walking path within its Main Lodge.

The presence of the fan in the walkway created a known trip hazard.

Unreasonably Dangerous Condition

Retail and recreational area owners and operators, such as Big Boulder, are responsible for taking reasonable steps to protect the safety of their customers. For example, the NSC notes in their *APM* (2):

All sales and service enterprises must exercise a high degree of care for the safety of their patrons. As long as a business is open, it assumes a responsibility for the well-being of its customers.

Consistent with the NSC recommendations, Big Boulder recognized the need to emphasis customer safety within its own policies. For example, within its 2015 Employee Handbook, Big Boulder notes:

SAFETY

Safety Policy and Incident Procedures

It is the firm and continuing policy of our company that all facets of our operation provide a safe place for employees to work and a safe place for the public to participate in the many and varied activities offered by Peak Resorts Inc. It is our objective to provide and maintain a work/recreation area free from recognized hazards and consisting of safe equipment, materials and safe methods and practices for every employee.

Achieving this requires the assistance and cooperation of everyone. You will be trained in the safe way to do your job. Be alert and watch for unsafe conditions. ...

The safety of our customers and employees will be considered paramount. Safety will take precedence over expediency or shortcuts in operation of the company and every attempt will be made to reduce the possibility of an accident. Furthermore, it is the company's intent to abide by all applicable recommendations, regulations and laws concerning safety and the safe conduct of any of our operations.

To protect customers from trip and fall injuries, retail stores and recreational area operators, like Big Boulder, need to maintain their floors free of obstacles and other potential items that customers may trip and fall over (e.g., a fan placed in the walkway). Proper housekeeping and maintenance practices are one method used to identify and mitigate trip hazards along walkways (2-6). For example, the NSC notes in their *APM* (2):

Poor housekeeping accounts for one-third of all customer falls. Each employee needs to realize that it is part of his or her responsibility to maintain good housekeeping in the sales area and to promptly report unsafe floor conditions, such as tears in carpets and holes in the floors.

The NSC references *Loss Control: A Safety Guidebook for Trades and Services*, a 1973 book on retail safety by Matwes and Matwes, in their *APM* (6). Within several of their "Loss Prevention" and "Accident Control" inspection checklists, Matwes and Matwes identify the following hazardous conditions that should be identified and mitigated (6):

Housekeeping:

- Aisles clear
- Aisles, floors, and stairs well maintained?
- Debris on floor

Within their *Loss Control* book, Matwes and Matwes also provide an "Inspection Checklist" that retail stores can implement to improve customer safety (6). The checklist includes the following items under "General Conditions, Maintenance" (6):

10. Are all aisles unobstructed?
11. Are all entrances unobstructed?

Consistent with Matwes and Matwes recommendation for using proper housekeeping processes for detecting and eliminating trip hazards, Garrone advises retailers to take the following actions to prevent customer falls (3):

- Design a safety program around detection of known hazards (see the second bullet above) and elimination of those hazards.

- Develop checklists or store self-inspection forms around these known hazards. This will take care of the physical hazards.

With respect to housekeeping practices, Garrone also notes (3):

Make all store employees aware of their responsibility to remove all foreign objects and fallen merchandise from the floor. Educate them on the need to remove these objects and clean up spills immediately.

Another area of emphasis in the prevention of trip and falls is the removal or protection of moveable equipment and/or tools left or used in the walkway. For example, the NSC notes in their *I-495 Datasheet* (5):

Moveable equipment

31. Because fixtures, displays, and other portable equipment may be involved in customer falls, it is important that management provide safe equipment and that the injury prevention program places emphasis on the safe use of that equipment. It is impossible to discuss here every precaution applicable to movable equipment. The safe practices indicated in the following paragraphs reflect the precautions most often indicated.

32. Remove clothing racks, fixtures, and stock hand trucks from the sales area to the stock room as soon as they have been emptied. When clothing racks/fixtures are in use on the floor, place them so they do not block aisles, or extend from a side aisle into a main aisle. Minimize the use of pallet jacks, flat bed carts, dollies, and rolling apparel racks on sales floors during store hours.

and

Repairs

48. When repairs or renovations must be carried out in public areas during working hours, make arrangements to close off or otherwise safeguard the areas affected. A person should be assigned to monitor the job, making sure debris and tools do not remain on the floor, especially in traffic lanes. Make sure exits are not blocked when customers or employees are in the facility.

The goal of the above cited safety guidelines is to identify, prevent, and eliminate trip hazards in the environment to reduce the potential of customer falls and injuries. Product safety policies dictate that a fan should not be left in the walkway unattended. Furthermore, proper housekeeping practices dictate that the unattended presence of the fan should have been promptly identified and remove.

Big Boulder had a responsibility to identify and protect customers from the trip hazard created by the placement of the fan within a foreseeable walking path.

Trip Hazard Mitigation

Consistent with the safety guidelines noted above, Big Boulder should have identified the trip hazard created by the unattended presence of the fan in the walkway. Once identified, Big Boulder had a responsibility to address the trip hazard created by the presence of the fan.

Danger is a function of hazard and exposure (2). A hazard is anything that can result in injury or property damage (e.g., trip hazard). If there is no hazard there is no corresponding danger. Exposure is a function of number of people potentially exposed to the hazard and the probability of an adverse event occurring (2). If there is no potential for contact with the hazard or there is no likelihood that an adverse event will happen there is no danger.

A nationally recognized safety hierarchy has been established to mitigate hazards that exist in retail and commercial environments (2-9). The safety hierarchy dictates that hazards should be eliminated through design or substitution whenever reasonably feasible (2,7,8). Removing the hazard eliminates the danger. If a hazard cannot be designed out, guards should be provided to protect patrons from the hazard (2,7). Guards are used to separate the customer from the hazard (e.g., a guardrail along the open side of a balcony) and eliminate or minimize the risk of exposure to the hazardous condition (e.g., the change of inadvertently falling) thereby minimizing the danger associated with the condition (i.e., reasonably safe). Warnings are third in the hierarchy but should not be used as a substitute for safe design and/or guarding solutions (2,7,8). For example, ASTM F1637 – 13, *Standard Practice for Safe Walking Surfaces*, states (8):

11. Warnings

11.1 The use of visual cues such as warnings, accent lighting, handrails, contrast painting, and other cues to improve the safety of walkway transitions are recognized as effective controls in some applications. However, such cues or warnings do not necessarily negate the need for safe design and construction,

To eliminate the trip hazard created by the presence of the fan, Big Boulder should not have placed the fan in the walkway. The fan was used to dry the moisture along the floor in front of the entrance doors. To achieve this goal while protecting their customers from the trip hazard presented by the fan, Big Boulder should have placed the fan on the opposite side of the entrance hallway and within the cafeteria. The layout of the cafeteria provides a space between the north wall of the cafeteria (the wall that separates the cafeteria from the hallway leading to the restrooms) and the northern most register. The area between the wall and register station was not readily accessible to customers. Had Big Boulder placed the fan between the wall and register along the east edge of the cafeteria, it would have eliminated the trip hazard from the walkway.

If it did not want to eliminate the trip hazard created by the fan, Big Boulder should have minimized exposure to the hazard by barricading off the area around the fan. Big Boulder could have used caution tape and stanchions, orange safety cones, or placed chairs around the fan.

Had Big Boulder constructed a barricade around the fan, customers would have been alerted to its position and directed around it. For example, Melissa O'Connor testified that she would expect tape or a chair around the fan to make it stand out and so that you can see it when you walk into the lodge (MO, 47,48).

If Big Boulder chose not to eliminate the trip hazard by relocating the fan or using a barricade to separate pedestrians from it, the least it should have done was posted a warning to alert customers to the presence of the trip hazard. For example, Big Boulder should have posted a warning sign in front of the fan at eye level or at the very least placed an orange or yellow safety cone in front of the fan to attract the attention of its customers as they entered the lodge. Similar warnings are commonly used to alert and inform pedestrians to the presence of hazards along walkways. For example, with respect to warnings, ASTM F1637 – 13 states:

When relying on applications of color as a warning, provide colors and patterns that provide conspicuous markings for the conditions being delineated, their surroundings, and the environment in which they will be viewed by users. Bright yellow is a commonly used color for alerting users of the presence of certain walkway conditions. When properly applied and maintained, other colors can also provide effective warnings.

The use of a warning to alert patrons to the presence of the fan is consistent with the experience of Dunn and his friends. For example, Paul Dunn testified that he would have expected a warning sign to be posted near the fan or a cone placed in front of the fan to alert him to its presence (PD, 79). Melissa O'Connor also testified that if there is a trip hazard along the floor she expects there to be a warning, sign, or something around it (e.g., caution tape, chain, bright yellow) to make it stand out so that you could see it (MO, 47,48). Had Big Boulder placed a warning in front of the fan, Paul Dunn would have seen it and avoided the fan.

Big Boulder had a responsibility to identify and address the trip hazard created by the presence of the fan left in the walkway. Big Boulder failed to identify and address the trip hazard created by the presence of the fan. Big Boulder violated known industry standards by failing to identify and address the trip hazard created by the presence of the fan. Big Boulder had readily available options to eliminate, guard, and/or warn customers of the trip hazard created by the presence of the fan.

Had Big Boulder complied with the standard of care and eliminated, guarded, or provided warning of the fan Paul Dunn would not have fallen or been injured. Big Boulder's failure to correct the trip hazard created by the presence of the fan was unreasonably dangerous, created an unreasonably dangerous condition, and caused Paul Dunn's trip, fall, and injury.

E.2. The presence of the fan created an inconspicuous trip hazard.

Research has found that people are likely to trip over objects that they do not expect, are not conspicuous relative to their background, and are low to the ground (10). Consistent with the scientific literature, Paul Dunn tripped over the unexpected and inconspicuous fan located at ground level.

Expectations

Expectancies develop through repeated experiences with similar environments that function consistently from one experience to the next (7,11,12). For example, people in the U.S. have learned to expect (7-9,11,13):

- That the volume on a radio is increased by turning the dial clockwise;
- A light is turned on by moving a wall switch into the up position;
- The color red means stop or hot;
- Warnings are provided in close proximity to hazards;
- Yellow paint is used to identify trip hazards in the environment.

Expectancy relates to a person's ability to respond to situations, events, and information in predictable and successful ways (7,11,12). Expectancies affect how well (speed and accuracy) people process information (7,11,12). When expectancies are met, performance is quick, efficient, and without error (7,11,12). However, when expectancies are violated, errors and confusion result (7,11,12).

Expectations also drive our visual search and affect the likelihood of noticing objects and hazards (7,11,12). For example, when a hazard is expected, it is more likely to be noticed (7,11,12). However, when a hazard is not expected, it is less likely to be noticed (7,11,12). People also look for objects based on where they expect them to be found (7,12).

Research has shown that people do not think about unknown or unexpected hazards in familiar situations (7,14,15). The result is that people who do not expect a hazard to exist will not actively look for one (7,14,15). Furthermore, people who are not aware of a hazard do not realize that they are putting themselves at risk and do not knowingly take steps to avoid the unknown hazard (7,14,15). People also do not usually expect to encounter trip hazards without warning in the built environment (7-10).

The placement of the fan in the walkway was unexpected. Safety guidelines, policies, and procedures are widely implement to remove trip hazards from the built environment. The same safety guidelines, policies, and practices require the use of barriers and/or warnings to protect people from trip hazards when they are present in the built environment. As such people do not usually expect to encounter trip hazards without warning in the built environment (7-10). For example, Melissa O'Connor testified that if there is a trip hazard along the floor she expects there to be a warning, sign, or something around it (e.g., caution tape,

chain, bright yellow) to make it stand out so that you could see it (MO, 47,48). Paul Dunn also testified that he would have expected a warning sign or a cone placed in front of the fan to alert him to its presence (PD, 79).

Big Boulder left the fan on the ground, in the walkway, at a corner, unattended with no warnings. Paul Dunn testified that he did not see the fan before he fell, he did not expect to encounter the fan, and he had no clue that the fan was there (PD, 72,80,82).

The presence of the fan created an unexpected tripping hazard to patrons not alerted to its presence, such as Paul Dunn.

Conspicuity

Conspicuity, also known as salience or prominence, is defined as the quality or state of being conspicuous, obvious to the mind or eye, or attention getting. If something is conspicuous it readily stands out from its surrounding environment, clutter, and noise. To be conspicuous an object must possess conspicuity enhancing characteristics or features. Conspicuity enhancing characteristics include: brightness and color contrast; borders, highlighting, delineation, and larger size; and also changing, moving, blinking, and/or flashing features (7,9,10,12,16).

To attract attention away from other objects and events in the environment, an unexpected trip hazard must be conspicuous within the clutter and distractions that surround it (7-10,12,16). If the tripping hazard lacks conspicuity enhancing characteristics, it will fail to attract a person's attention (7-10,12,16). Furthermore, the greater the clutter and the number of distractions the more conspicuous the tripping hazard will need to be to capture the attention of unsuspecting patrons (7-10,12,16).

The fan that Big Boulder placed in the walkway did not possess any highlighting, borders, or delineation; it did not move, blink or flash. The fan was a dull gray against a brownish/tan background. The fan was less than two feet in height and width and would have presented a relatively small target in the larger room.

The fan was also positioned behind the support column along the right side of the west entrance hallway (PD, 57,65,68-70,79,80; CJ, 18,28,29,30; MO, 27,57). Given its position behind the support column, all or most of the fan would have been obstructed from the view of pedestrians as they walked through the entrance doors. For example, Paul Dunn testified that given the placement of the fan behind the support column you could not see it while walking straight into lodge from the entrance (PD, 60,65,68,70). Melissa O'Connor testified that she did not see the fan as she entered the lodge and is not sure if she could see the fan as she walked around the corner (MO, 26,55). Collin Johnston also testified that he did not see the fan before Dunn fell (CJ, 28-30,38).

There is no evidence that the fan was running at the time of Dunn's fall. For example, Paul Dunn, Collin Johnston, Melissa O'Connor, and Big Boulder employee, Danielle Dodge testified

that they do not recall the fan being on nor do they remember hearing the fan running at the time of Dunn's fall or afterwards (PD, 71,95; DD, 20; CJ, 38; MO, 28). Melissa O'Connor also testified that she did not notice any air coming from the fan as she walked by it (MO, 28).

The fan did not possess the minimal conspicuity enhancing features necessary to attract the attention of unsuspecting patrons, such as Paul Dunn.

Location and attention

Most environments can be considered complex where people must divide their attention among various events and objects. However, people only have a limited pool of mental resources and are not able to simultaneously attend to everything in their environment at the same time (12,16). For example, the ability to avoid an obstacle while walking is significantly decreased when one attempts to divide their attention between avoiding the obstacle and performing another visual task (17).

People's attention is drawn to the most salient or conspicuous objects and activities in the environment (7-10,12,16). Furthermore, it is expected that people look at which they are visually attending to (12). However, this selection in attention impairs the ability to see objects outside of one's focus of attention (7,10,12,16,18). Visual focus is the small area of one's visual field (fovea - about 2 degrees) where details are perceived (7,12,16,18). The farther an unexpected object falls from the center of one's vision, the less likely it is to be seen (7,10,12,16,18). For example, the likelihood of detecting a relatively small static object located more than 40 degrees from our line of sight is less than 20% (18). A consequence of the limited size of our foveal vision is that when patrons look at the displayed products, signs, or other objects in the environment (e.g., other pedestrians), objects and obstacles along the walking path fall into peripheral vision where they are unlikely to be noticed (7,10,12,16,18).

As Paul Dunn and his friends walked into the LB Room using the west entrance there were multiple other objects and activities fighting for his attention, including:

- The presence of other patrons exiting the building when he walked in through the doors (PD, 39,40,44).
- The cafeteria (including the people and workers in the cafeteria, merchandise for sale and activities) to his left as he walked into and along the hallway to the corner.
- His friends who were to his left as he entered the lodge and approached the fan (PD, 28,44,50-52; CJ, 17,18,28; MO, 23-25,50)
- His conversation with his friends as he walked into the lodge (PD, 61; CJ, 19).
- Other pedestrians passing by on his left as he approached the fan (PD, 49).
- The variety of other people in the lodge who were sitting at the tables and mingling about (PD, 46,47; CJ, 21,22; MO, 24).
- The large windows located directly ahead of him as he entered the lodge and walked straight toward the corner.

- The posters, wall decorations, and décor of the LB Room and sun room including their tall, open rafter, vaulted ceilings.
- The presence of the stairs to the lower level (i.e., Dunn's destination) as he turned the corner around the support column.

Dunn testified that he was watching where he was going, was looking ahead of him, and had almost completed his turn and was almost facing the stairs when he fell (PD, 60,61,64,80).

Dunn's view of the fan as he entered the LB Room was obstructed by the support column and garbage can that were located between him and the fan. As Dunn progressed into the LB Room and turned right the fan would have come into view. However, by the time the fan came into view, it fell in Dunn's lower peripheral vision while his attention was directed towards his friends, the other patrons in the lodge, and their destination (i.e., the staircase).

Contrary to the other objects fighting for Dunn's attention as he entered and approached the fan, the fan was located on the floor, at least partially obscured by the support column, and on the far side of a corner. Given the other objects fighting for Dunn's attention, the fan would have fallen into his lower peripheral vision where it was unlikely to be noticed without the use of conspicuity enhancing characteristics.

Trip hazards

Trip and falls occur when a pedestrian encounters an unexpected obstacle and does not perceive it in their route of travel. The visual field of a walking person is moving and dynamically changing yet only a small part of that field is being attended to (12,16,18). Obstacles that fall outside of this small area are not perceived unless they are unobstructed and conspicuous (e.g., yellow paint used to attract attention to a walkway hazard) (7-10,12,16,18).

Paul Dunn's trip and fall is consistent with research that has found that unexpected and inconspicuous trip hazards that are located at ground level are not likely to be noticed (10). This result is expected and explained based upon basic principles of visual perception and human expectancy (7,10-12,16,18):

- Trip hazards that fall in peripheral vision must possess attention grabbing properties to be seen.
- Trip hazards that are not expected require conspicuity enhancing properties to be seen.

Paul Dunn reasonably did not expect to encounter the fan as he walked into lodge and around the corner; the fan did not possess adequate conspicuity enhancing features; and the fan was located at ground level in a clutter environment, low in Dunn's peripheral vision as his attention and visual focus were directed ahead of him toward his destination (e.g., the interior of the lodge and stair).

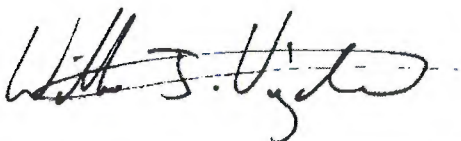
The presence of the fan was not a reasonably open and obvious condition as it was presented to Paul Dunn.

Given the unexpected and inconspicuous nature of the fan, it was foreseeable to Big Boulder that customers, such as Paul Dunn, would not identify it, trip over it, and fall.

F. FINDINGS

Within the bounds of reasonable scientific certainty, and subject to change if additional information becomes available, it is my professional opinion that:

1. The presence of the fan in the walkway created a known trip hazard.
2. Big Boulder had a responsibility to identify and protect customers from the trip hazard created by the placement of the fan within a foreseeable walking path.
3. Big Boulder failed to identify and address the trip hazard created by the presence of the fan.
4. Big Boulder violated known industry standards by failing to identify and address the trip hazard created by the presence of the fan.
5. Big Boulder had readily available options to eliminate, guard, and/or warn customers of the trip hazard created by the presence of the fan.
6. Had Big Boulder complied with the standard of care and eliminated, guarded, or provided warning of the fan Paul Dunn would not have fallen or been injured.
7. Big Boulder's failure to correct the trip hazard created by the presence of the fan was unreasonably dangerous, created an unreasonably dangerous condition, and caused Paul Dunn's trip, fall, and injury.
8. The presence of the fan created an unexpected tripping hazard to patrons not alerted to its presence, such as Paul Dunn.
9. The fan did not possess the minimal conspicuity enhancing features necessary to attract the attention of unsuspecting patrons, such as Paul Dunn.
10. Given the other objects fighting for Dunn's attention, the fan would have fallen into his lower peripheral vision where it was unlikely to be noticed without the use of conspicuity enhancing characteristics.
11. The presence of the fan was not a reasonably open and obvious condition as it was presented to Paul Dunn.
12. Given the unexpected and inconspicuous nature of the fan, it was foreseeable to Big Boulder that customers, such as Paul Dunn, would not identify it, trip over it, and fall.



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H. APPENDIX

WILLIAM J. VIGILANTE JR., PhD, CPE
Human Factors / Ergonomics Expert

HUMAN FACTORS and ERGONOMICS EXPERIENCE

Over 22 years of experience in the researching, designing, and evaluating driver performance, roadway safety, pedestrian safety, control-display design, consumer and commercial products and equipment, safety and hazard analyses, risk perception, and design of warnings and instructional materials.

- **Warnings:** Assess the adequacy of warning labels, signs, and user manuals to communicate hazards, motivate compliance, and improve safety. Assess the effect of the warning design and presentation as well as situational and inter/intra personal factors on compliance and risk taking behavior.
- **Vision and Driving:** Assess issues related to visual perception, reaction time, and expectancies along with lighting and roadway conditions related to vehicle collisions. Investigation of pedestrian knockdown collisions, collisions involving stop or slow-moving vehicles, and collisions related to lack of positive guidance and adequate roadway signage.
- **Motorcycle:** Assess rider actions and visibility.
- **Slips, Trips, and Falls:** Determine how attention and perceptual issues affect a person's ability to detect and avoid slip, trip, and fall hazards. Standard of care for building owners/operators and retailers to ensure safe walking surfaces in public spaces.
- **Work Place Safety:** Assess work place and equipment design and safety procedures on incident occurrence and prevention.
- **Recreational and Sporting Activities:** Perceptual abilities and reaction times and how these human factors affect people's ability to safely interact with recreational vehicles, sporting equipment, firearms, and swimming pools.
- **Lighting:** Environmental lighting analysis and its effect on people's ability to notice and recognize walkway and roadway hazards.
- **Accessibility:** Evaluating consumer and commercial products to meet Section 508 of the Americans with Disabilities Act.
- **Aging:** Assess the effects of aging on older adult's ability to read product labels and warnings; operate motor vehicles including night driving and vision, perception/reaction time and roadway navigation; and wayfind in the built environment including the effects of changes in gait, walking ability, and detecting and avoiding walkway hazards.
- **Medication Labeling:** Assess people's ability to notice, read, and understand medication labeling and advertising.
- **Product Design and Development:** Developed a variety of hardware and software interfaces and support materials for a wide range of consumer and commercial products, including: graphical user interface designs, laptop and desktop computer systems, wireless systems, input devices, storage devices, visual displays, user guides, installation wizards, safety manuals, web sites, and an eXtensible markup language (XML).
- **User Centered Design:** Carried out User Centered Design processes and activities within all phases of the product design and development cycle, including: task analyses, competitive evaluation, focus groups, iterative usability testing, and design validation.

EXHIBIT C

EXHIBITS

Plaintiff intends to introduce the following exhibits at trial:

- P-1 Complaint
- P-2 Plaintiffs Discovery Requests to Defendant
- P-3 Defendants Response to Plaintiff's Discovery Requests
- P-5 Defendants' Discovery Requests to Plaintiff
- P-6 Plaintiff's Response to Defendant's Discovery Requests
- P-7 Photographs of walkway with drying fan/blower
- P-8 The Children's Hospital of Philadelphia Radiographs taken January 30, 2015
- P-9 Lake Harmony Rescue Squad – medical records and bills
- P-10 Geisinger Wyoming Valley Medical Center – medical records and bills
- P-11 The Children's Hospital of Philadelphia – medical records and bills
- P-12 Children's Surgical Associates, LTD – medical records and bills
- P-13 David A. Spiegel, M.D. – medical records and bills
- P-14 John Giordini, M.D. – medical records and bills
- P-15 Witness Statement of Melissa O'Connor
- P-16 Witness Statement of Collin Johnston
- P-17 Deposition of Paul Dunn, taken June 19, 2017
- P-18 Deposition of Melissa O'Connor, taken August 15, 2017
- P-19 Deposition of Collin Johnston, taken August 15, 2017
- P-20 Deposition of James Davenport, taken June 13, 2017
- P-21 Deposition of Danielle Dodge, taken June 13, 2017
- P-22 Deposition of Kim Slack, taken September 5, 2017

- P-23 Deposition of Michael Dodge, taken September 5, 2017
- P-24 Deposition of Chris Schmidt, taken September 5, 2017
- P-25 David A. Spiegel, M.D., narrative report dated May 8, 2017
- P-26 Curriculum Vitae of David A. Spiegel, M.D.
- P-27 William J. Vigilante, Jr., PhD, CPE, Vigilante Forensic, narrative report dated August 31, 2017
- P-28 Curriculum Vitae of William J. Vigilante, Jr., PhD, CPE
- P-29 Photographs of Site Inspection, William J. Vigilante, Jr., PhD, CPE
- P-30 Equian/Independence Blue Cross Blue Shield lien summary June 6, 2017